

# LEAN 101

5 S

## Lean 101 - 5 S

### The 5 Ss = Sort, Set in Order, Shine, Standardize, Sustain

Based on Japanese words that also begin with 'S,' **5S** is a philosophy and tool to simplify, clean up, and organize your workplace and work materials in order to reduce waste and optimize quality and productivity. By maintaining an orderly workplace/work materials, standardizing your work, and using visual cues you will be able to achieve more consistent results. A well-ordered, effective workplace, including work materials and work products, is the foundation of improvement. As a result, **5S** is often the first *Lean* method/tool used.

**5S** provides a cyclical, ongoing approach with five methodologies for organizing, cleaning, developing, and sustaining a productive work environment. In the daily work of your organizational unit, routines that maintain organization and orderliness are essential to the smooth, efficient flow of work. This approach encourages all staff to improve their working conditions. Keep in mind that the 5S concepts and approach can also be generalized much more broadly.

#### ◆ **SORT** (*Seiri*)

- Sort out what you do not need or do not use.
  - Evaluate the necessity of each item/material in a work area and deal with it appropriately.
    - One effective visual method is to “Red Tag” items that are not needed or important for operations or that are not in the proper location or quantity. These are then moved to a central area for disposal, recycling, or reassignment.
  - Eliminate unnecessary items.
    - Items that are used only occasionally can be moved to a more organized storage location outside of the work area while unneeded items are discarded. Sorting is an excellent way to free up valuable space and eliminate unused or broken items and outdated/obsolete files/information, forms, equipment, and supplies.
- Ask: How often do I need or use it?
  - The Sort process helps prevent a Just in Case (JIC) job mentality.

#### ◆ **SET IN ORDER** (*Seiton*)

- Organize what is left efficiently and effectively, minimize wasted motion.
  - What do I need to do the work?
  - Where do I keep it?
  - Is it within reach?
  - How many do I need?

- Use visual systems – make the workplace and products “talk.”
- Anyone can find anything at any time.
- Out-of-standard situations are obvious to everyone.
- Assure that there’s “A place for everything and everything in its place.”

#### ◆ **SHINE [and Inspect]** (*Seiso*)

- Remember the effect of a clean, well-ordered workplace and work materials and products on productivity and team morale.
  - Decide:
    - What to review/inspect and to refine/clean/polish.
    - How to refine/clean.
    - Who will do the this work?
    - How clean is clean? (How perfect is perfect?) Need for standards, specifications?
- Identify best practice, standards: How much time is needed to do the work well? Has the work been described/documented? Have staff been sufficiently training to do the work well and without waste?

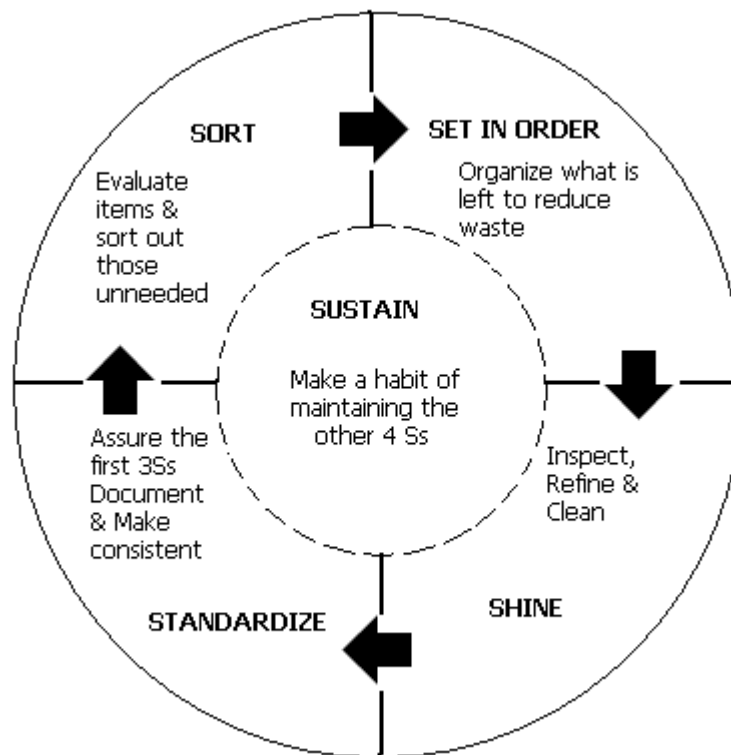
#### ◆ **STANDARDIZE** (*Seiketsu*)

- Implement consistent approach for procedures, materials, tasks – all work:
  - Document.
  - Make visual whenever appropriate.
  - Implement Best Practices consistently.
  - Build systems and process that produce replicable and reliable results.
  - Standards make variation visible.
- Assure that all staff are involved in setting the standards for their work.
- Remember the Second Law of Thermodynamics.

#### ◆ **SUSTAIN** (*Shitsuke*)

- This **5S** pillar/stage can be the most difficult to implement and – ironically – to maintain. As we all know, without effort and support, it is all too easy to slip back into old ways.
- Maintain this discipline through the implementation of continual improvement systems and culture.
- **5S** can become the new status quo, the embedded, normal way of doing business through:
  - Promotion.
  - Communication.
  - Training.
  - Monitoring.

# Five S



## Applying Lean Concepts - 5 S

### 5 S Worksheet

**Purpose:** The purpose of this task is to recognize **5S** opportunities in your work environment in order to apply **5S** Lean Concepts.

The **5S** philosophy focuses on effective workplace organization and standardized work procedures. **5S** simplifies your work environment and reduces waste and non-value activity while improving quality, efficiency, and safety.

**Method:** Take a walk through your work site.

**Task:** Identify where **5S** applies

Name Area:

1. Describe **5S** opportunities:

**5S** Name

2. Name the Waste(s) you eliminate with **5S**:

**5 S Overview:** The overall idea behind the *Five Ss* is that there is "a place for everything and everything goes in its place" -- that through a systematic approach, people will feel more ownership of the workplace. This encourages self-discipline and the improvement of the quality and safety (which some consider the 6<sup>th</sup> S) of the working environment. It ensures that the workplace is well-organized and that the workflow can be easily seen.

5S is a systematic process of work environment organization -- the principle of waste elimination through workplace organization. Discipline, simplicity, pride, standardization and repeatability, as emphasized in the *Five Ss*, are critical to the Lean enterprise in general and flow implementations specifically. The philosophy behind 5S includes order, organization, discipline, elimination of bad habits, and wasted effort and should be an intuitive aspect of the approach to working.

The five terms, all beginning with S, are derived from the Japanese words seiri, seiton, seiso, seiketsu, and shitsuke. In English the 5Ss are sort, set in order, shine, standardize, and sustain.

Five S			
AMERICAN		JAPANESE	
<b>SORT</b>	Evaluate and eliminate everything not required for the current work, keeping only the bare essentials.	<b>Seiri</b> 'Say-ree' (Organization)	Separate needed tools, parts, and instructions from unneeded materials & instantly remove the latter unnecessary things.
<b>SET IN ORDER</b> (Straighten)	Arrange items in a way that they are easily visible and accessible.	<b>Seiton</b> 'Say-ton' (Tidiness)	Put things in order: Neatly arrange and identify materials & equipment/tools for ease of use
<b>SHINE</b> (Sweep)	Inspect, refine, and clean everything and find ways to keep it clean. Make this a part of your everyday work.	<b>Seiso</b> 'Say-soo' (Purity)	Conduct a cleanup campaign. Clean to original condition. Do cleaning work positively.
<b>STANDARDIZE</b> (Systematize)	Create rules and procedures by which the first 3 S's are maintained. Document.	<b>Seiketsu</b> 'Say-kit-sue' (Cleanliness)	Conduct the other 3Ss at frequent, in fact daily, intervals to maintain a work environment in perfect condition. Free from bad habits.
<b>SUSTAIN</b> (Self-discipline)	Keep the other 4S activities from unraveling.	<b>Shitsuke</b> 'Shit-zuk-ay' (Discipline)	Be disciplined. Form the habit of always following the first four Ss, maintaining what has been achieved. Be well-mannered; use polite behavior.

